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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/865,166	05/24/2001	Raymond T. Hsu	PA010115	2831
23696 7590 04/11/2007 QUALCOMM INCORPORATED 5775 MOREHOUSE DR. SAN DIEGO, CA 92121			EXAMINER RYMAN, DANIEL J	
			ART UNIT	PAPER NUMBER
			2616	

SHORTENED STATUTORY PERIOD OF RESPONSE	NOTIFICATION DATE	DELIVERY MODE
3 MONTHS	04/11/2007	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

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Office Action Summary

Application No.

09/865,166

Applicant(s)

HSU ET AL.

Examiner

Daniel J. Ryman

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 February 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) See Continuation Sheet is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 94,100,101,112,118-120 and 126-128 is/are allowed.
- 6) ☒ Claim(s) 1,7,8,19,25-27,33-37,43-45,51,52,54,55,66-68,74-76,82 and 83 is/are rejected.
- 7) ☒ Claim(s) 1,19,27,35-37,43-45,54,55,66,76,94,112,120 and 128 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Response to Arguments

1. Examiner acknowledges Applicant's filing of an RCE on 14 February 2007
2. Applicant's arguments with respect to claims 1, 7, 8, 19, 25-27, 33-37, 43-45, 51, 52, 54, 55, 66-68, 74-76, 82 and 83 have been considered but are moot in view of the new ground(s) of rejection.

Claim Objections

3. Claims 1, 19, 27, 35, 45, 66, 76, 94, 112, 120, and 128 are objected to because each of these claims recites "a Point-to-Point Protocol link having an Internet Protocol Address" or a variation thereof. The Specification discloses that the endpoints of the PPP link have IP addresses, not the link itself. Specification: ¶ [1085]. Therefore Examiner suggests changing "a Point-to-Point Protocol link having an Internet Protocol Address" to "a Point-to-Point Protocol link having endpoints having an Internet Protocol Address". Appropriate correction is required.
4. Claims 36, 37, 43, and 44 are objected to because of the following informalities: in line 1 of each of these claims, "method of claim 35" should be "system of claim 35" since claim 35 recites a system rather than a method. Appropriate correction is required.
5. Claims 54 and 55 are objected to as being substantial duplicates of claims 51 and 52, respectively.

Claim Rejections - 35 USC § 101

6. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

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7. Claims 1, 7, 8, 19, 25-27, 33-37, 43-45, 51, 52, 54, 55, 66-68, 74-76, 82 and 83 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

8. To comply with the subject matter eligibility requirement of 35 U.S.C. § 101, a claim must pass the following test: (1) Does the claimed invention fall within one of the statutory classes? If not, then the claim is non-statutory. (2) If it does, does the claimed invention fall/cover/include a judicial exception? If not, the claim is statutory. If so, the claim is only statutory if there is a practical application (a) by physical transformation or (b) that produces a useful and tangible result.

9. In this case, claims 1, 7, and 8 (directed to a method); claims 19, 25, and 26 (directed to a method); claims 27, 33, and 34 (directed to a method); claims 35-37, 43, and 44 (directed to a device); claims 45, 51, 52, 54, and 55 (directed to a device); claims 66-68, 74, and 75 (directed to a node); and claims 76, 82, and 83 (directed to a device) meet Question One since they fall within either the “process” or “machine” statutory classes of 35 U.S.C. § 101. However, these claims fail Question Two since they fall within a judicial exception, i.e. the claims are an attempt to seek patent protection of a computer program in the abstract. This is evidenced by claims 94, 100, 101, 112, 118-120, 126 and 127 which demonstrate that the method and programs implemented by the devices are implemented using computer programs. Since the claims are merely trying to claim a “computer code” in the abstract, the claims fall within the “abstract idea” judicial exception.

10. Once the answer to Question Two is “yes,” i.e. the claimed invention falls under a judicial exception, the claimed invention is only statutory if it produces either a practical

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application by physical transformation or a practical application that produces a useful and tangible result. In this case, there is no practical application by physical transformation since the software does not manipulate any physical structure and since the structure of the machines in each of these claims does not change. In addition, there is no practical application that produces a useful and tangible result since, when implemented in software, the claims never require that the software be executed by a computer. Therefore, the claims are non-statutory.

11. In order to make these claims statutory, Applicant could amend the claims to turn the method steps into structural limitations, e.g. "means for establishing" or "means for differentiating". Applicant could also amend the claims to turn the claims into a purely "software" claim by amending the claims to read, for example, "A computer-readable medium encoded with a data structure [or software] for utilizing a single Internet Protocol address for multiple Point-to-Point Protocol instances between a single wireless device and a wireless network."

Allowable Subject Matter

12. Claims 94, 100, 101, 112, 118-120, and 126-128 are allowed. The prior art does not disclose or fairly suggest differentiating the endpoints of multiple PPP links using a link characteristic including at least one of a compression type, encryption level, RLP transmission delay, and guaranteed delivery level.

Conclusion

13. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Warrier et al. (USPN 6,684,256) see col. 1, line 52-col. 2, line 51, which details

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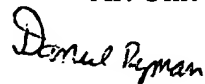
distinguishing between multiple PPP links having the same associated IP address through unique pairs of home IP addresses and home agent IP addresses.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Daniel J. Ryman whose telephone number is (571)272-3152. The examiner can normally be reached on Mon.-Fri. 8:00am-4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Huy Vu can be reached on (571)272-3155. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Daniel J. Ryman
Examiner
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Continuation of Disposition of Claims: Claims pending in the application are 1,7,8,19,25-27,33-37,43-45,51,52,54,55,66-68,74-76,82,83,94,100,101,112,118-120 and 126-128.